

## ABSTRACT

An apparatus (10) for splicing a heatable section (20) of a tubular heater (12) to a cold section, (22) the heatable section 5 (20) includes an outer sheath (78), which has a heating element (84) therein. The cold section (22) includes an outer sheath (88) which has a cold pin (94) therein. The apparatus (10) comprises an enclosure (12) defining a chamber (62) which further defines opposed openings in communication with the chamber (62).  
10 A welding tip (30) extends into the chamber (62) and is capable of melting the cold pin (94) and welding the ends (80,90) of the heatable and cold sections (20,22) together.

When one end (80) of the heatable section (20) and one end (90) of the cold section (22) is each directed into one of the 15 opposing openings to a predetermined depth, the welding tip (30) is then placed in close proximity with the end (90) of the cold section (22) forming a molten pool (128) thereon. The ends (80,90) of the heatable and cold sections are (20,22) then brought into contact wherein the molten pool (128) and the 20 heating element (84) form a weld connection therebetween as the pool solidifies. The welding tip (30) then forms a weld joint (134) along the juncture (136) of the ends (80,90) of the outer

sheaths (78,88) of the heatable and cold sections (20,22) thereby establishing a splice therebetween.